REMARKS

Entry of the foregoing amendments is respectfully requested.

Summary of Amendments

Upon entry of the foregoing amendments, claims 101 and 102 are amended, claims 68-97 are cancelled and claims 103-132 are added, whereby claims 1-67 and 98-132 will be pending , with claims 1, 103 and 131 being independent claims. Claims 45, 46, 55 and 67 are withdrawn from consideration.

Support for the new claims can be found throughout the present specification (see, e.g., paragraphs [0079] to [0081] at pages 17/18) and the original claims.

Applicants emphasize that the cancellation of claims 68-97 is without prejudice or disclaimer, and Applicants expressly reserve the right to prosecute these claims in one or more continuation and/or divisional applications.

Summary of Office Action

As an initial matter, Applicants note that the PETITION TO CORRECT INVENTORSHIP UNDER 37 C.F.R. 1.48(A) filed November 29, 2005 appears to have been granted because according to the online Assignment Records of the Patent and Trademark Office the assignment by the two additionally listed inventors was recorded on November 29, 2005. However, Applicants have not received a Decision stating that the Petition has been granted. Accordingly, Applicants respectfully request that a Decision stating that the Petition to Correct Inventorship under 37 C.F.R. 1.48(a) filed November 29,

2005 is granted be forwarded to Applicants as soon as possible.

Applicants note with appreciation that the Office Action indicates that the claim for foreign priority is acknowledged and that a certified copy of the priority document has been received by the Patent and Trademark Office.

Applicants further note with appreciation that the Examiner has indicated consideration of the Information Disclosure Statements filed on May 14, 2004 and October 5, 2005 by returning signed and initialed copies of the forms PTO-1449 submitted therein.

Claims 1-102 are subject to a restriction/election requirement. As a result of a provisional election with traverse by telephone on July 17, 2006, claims 45, 46, 55, 67 and 68-97 are withdrawn from consideration.

Claims 1-25, 40, 43, 44, 47-54, 58, 60-62, 66 and 98-102 are provisionally rejected under the judicially created doctrine of non-statutory obviousness-type double patenting as being unpatentable over allegedly conflicting claims 1, 3, 4, 8-13, 16, 17, 20, 21, 23-39, 45, 55, 56, 60-63, 65, 67-71, 73-86 and 99-103 of copending U.S. Patent Application Serial No. 10/681,204.

Claims 26, 27, 36, 39, 101 and 102 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-8, 10, 19, 25-39, 41, 48, 49, 50, 54, 56-62, 64-66, 101 and 102 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,191,216 to Ganster et al. (hereafter "GANSTER") in view of U.S. Patent No. 5,470,585 to Gilchrist (hereafter "GILCHRIST").

Claims 9, 11, 12, 23, 24 and 47 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of Park et al., U.S. Pre-Grant Patent Application Publication 2004/0018227 (hereafter "PARK").

Claim 17 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of U.S. Patent No. 4,920,172 to Daoud (hereafter "DAOUD").

Claims 16 and 18 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of PARK and DAOUD.

Claims 14 and 17 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of U.S. Patent No. 5,591,820 to Kydonieus et al. (hereafter "KYDONIEUS").

Claims 13, 15, 16 and 18 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of PARK and KYDONIEUS.

Claims 40, 42-44, 51-53 and 63 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of Fechner et al., U.S. Pre-Grant Patent Application Publication 2004/0137075.

Claims 98-100 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of Nomura, U.S. Pre-Grant Patent Application Publication 2001/0023156 (hereafter

"NOMURA").

Claims 20-22 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of NOMURA and Lee et al., U.S. Pre-Grant Patent Application Publication 2002/0086039 (hereafter "LEE").

Response to Office Action

Withdrawal of the restriction requirement and the rejections of record is respectfully requested, in view of the foregoing amendments and the following remarks.

Response to Restriction/Election Requirement

The Examiner has required restriction to one of the following inventions:

I. Claims 1-67 and 98-102, drawn to an antimicrobial wound covering article, classified in class 424, subclass 443.

II. Claims 68-78, drawn to a method of covering a wound, classified in class 424, subclass 78.06.

III. Claims 79-97, drawn to a process for producing an antimicrobial wound covering article, classified in class 424, subclass 485.

Further, the Examiner requests that elections of species be made with respect to claims 43-46, 55 and 67 (glass composition) and claims 52 and 53 (metal or metal compound incorporated within the polyurethane resin).

In order to be responsive to the requirement for restriction, Applicants confirm the provisional election, with traverse of the invention set forth in claims 1-67 and 98-102 (Invention I as identified in the Restriction Requirement), a glass composition comprising about 40-60 mole % P_2O_5, about 35-55 mole % of MgO, up to about 5 mole % Na_2O; and about 5-20 mole % SiO_2, and Zn as the metal to be incorporated in the polyurethane resin.

Traverse

Applicants respectfully submit that a restriction requirement is inappropriate in this case. Even if one were to assume, *arguendo*, that the inventions of Groups I to III are distinct, the requirement for restriction should be withdrawn, because there is no serious burden.

In MPEP Chapter 800, the Office sets forth its policy by which examiners are guided in requiring restriction under 35 U.S.C. § 121. Section 803 states that "[i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions."

Applicants note that all of the three inventions identified in the Restriction Requirement relate to antimicrobial wound covering articles, specifically, an antimicrobial wound covering article, the use of the antimicrobial wound covering article for covering a

wound, and a process of making the antimicrobial wound covering article. Accordingly, as a practical matter, the searches for inventions I to III should significantly overlap. For example, a search for invention I should cover many areas (if not be coextensive therewith) that are also relevant for inventions II and III. Thus, the search burden would not be serious. For the above reasons alone, the Restriction Requirement should be withdrawn, which action is respectfully requested.

Further, the Restriction Requirement alleges that "as opposed to using said antimicrobial wound covering article for covering a wound as claimed in Invention II, the composition claimed in Invention I may alternatively be used for covering a toilet seat, so as to impart protection from pathogenic bacteria."

Applicants respectfully disagree with the Examiner in this regard. Specifically, in order to exert its antimicrobial effect, the antimicrobial glass and thus, the antimicrobial wound covering article will have to be held in contact with a fluid (such as a wound fluid) to allow the antimicrobial metal to be leached from the glass composition. Applicants fail to see how a correspondingly wetted toilet seat would be acceptable to anyone.

This is yet another reason why the Restriction Requirement with respect to Inventions I and II is unwarranted and should be withdrawn.

Applicants note the rejoinder practice set forth in MPEP § 821.04, i.e., if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend or otherwise include all of the limitations of the allowable product claim will be rejoined. It is pointed out that although non-elected claims 68-97 are cancelled for the time being (merely to save excess claims fee), Applicants

expressly reserve the right to reintroduce the cancelled claims and/or similar claims which depend or otherwise include all of the limitations of the allowable product claims once the claims submitted herewith and/or similar claims have been indicated to be allowable.

Regarding the election of species requirement, Applicants note that upon the allowance of a generic claim, Applicants will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim.

Response to Provisional Claim Rejections under Doctrine of Obviousness-Type Double-Patenting

Claims 1-25, 40, 43, 44, 47-54, 58, 60-62, 66 and 98-102 are provisionally rejected under the judicially created doctrine of non-statutory obviousness type double patenting as being unpatentable over allegedly conflicting claims 1, 3, 4, 8-13, 16, 17, 20, 21, 23-39, 45, 55, 56, 60-63, 65, 67-71, 73-86 and 99-103 of copending U.S. Patent Application Serial No. 10/681,204.

Applicants respectfully request that this rejection be held in abeyance until the Examiner has indicated allowable subject matter. Applicants will then decide whether it is necessary to file a Terminal Disclaimer in the present application.

Response to First Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 26, 27 and 36 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject

matter which Applicants regard as the invention. According to the rejection, "confusion exists with respect to how a polyether polyol comprising from about 2 to about 6 hydroxy groups can have a hydroxy number of from about 20 to about 120".

Applicants respectfully submit that the hydroxy(l) number is the weight in milligrams of KOH required to neutralize the hydroxyl groups in one gram of polymer (see, e.g. the attached page downloaded from the site http://www.sigmaaldrich.com/img/assets/3900/Glossary.pdf; in accordance with M.P.E.P.§ 609C(3), this document is being submitted as evidence directed to an issue raised in the Office Action, and no additional fee or Certification pursuant to 37 C.F.R. §§ 1.97 and 1.98, or citation on a FORM PTO-1449 is believed to be necessary.)

Accordingly, the hydroxy number in combination with the OH groups per molecule is an indication of the (average) molecular weight of the polyether polyol. For example, the lower the hydroxy number at a given number of OH groups, the higher the (average) molecular weight of the polyether polyol (i.e., the more polyalkyleneoxy groups are present per molecule on the average).

Applicants submit that at least for the foregoing reasons, the rejection of claims 26, 27 and 36 under 35 U.S.C. § 112, second paragraph, is unwarranted and should be withdrawn, which action is respectfully requested.

Response to Second Rejection under 35 U.S.C. § 112, Second Paragraph

Claim 39 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which

Applicants regard as the invention. According to the rejection, "confusion exists with respect to what is meant by the claimed recitation of a functionality value being at least about 5.2".

Applicants submit that claim 39 recites "a product of a functionality of a polyisocyanate starting material and a functionality of a polyol starting material for producing the polyurethane." For example, if the polyisocyanate starting material were to consist of one or more diisocyanates, the functionality of the polyisocyanate starting material would be 2. Also, if the polyol starting material were to consist of one or more diols, the functionality of the polyol starting material would be 2 as well and the product of the functionalities of the polyisocyanate starting material and the polyol starting material would be 2 x 2 = 4. In other words, claim 39 indicates that the (average) functionality of the polyisocyanate and/or the (average) functionality of the polyol is higher than 2 since otherwise the product of these functionalities cannot be higher than 4. This in turn means that at least a certain proportion of the polyisocyanate starting material is constituted by tri- and/or higher isocyanates and/or that at least a certain proportion of the polyol starting material is constituted by triols and/or higher polyols. The proportion(s) is/are such that the product of the corresponding functionalities is at least about 5.2.

For at least the foregoing reasons, the rejection of claim 39 under 35 U.S.C. § 112, second paragraph, is unwarranted, wherefore withdrawal thereof is respectfully requested.

Response to Third Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 101 and 102 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. According to the rejection, "confusion exists with respect to what is meant by the claimed recitation of an antimicrobial activity value being at least about 3.6 and 3.3, respectively, against a particular microorganism 'when tested according to JIS 2801:2000'."

In this regard, Applicants submit that claims 101 and 102 have been rewritten to make these claims even clearer (if possible at all). Accordingly, this rejection is rendered moot.

Response to Rejection of Claims under 35 U.S.C. § 103(a) over GANSTER in View of GILCHRIST

Claims 1-8, 10, 19, 25-39, 41, 48, 49, 50, 54, 56-62, 64-66, 101 and 102 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GANSTER in view of GILCHRIST. The rejection essentially alleges that several of the features recited in the rejected claims are disclosed by GANSTER and that the remaining features are disclosed by GILCHRIST. The rejection concedes that GANSTER does not explicitly teach that the polyurethane wound covering article of GANSTER comprises a silver containing water soluble glass filler but essentially asserts that GILCHRIST teaches an antimicrobial wound covering article comprising such a silver containing water soluble glass filler dispersed within synthetic polymers. The rejection further alleges that it would have been *prima facie*

obvious to one of ordinary skill in the art to modify the wound covering article of GANSTER by incorporating therein the silver containing water soluble glass filler of GILCHRIST as the glass filler which according to GANSTER may optionally be present in the wound covering article disclosed therein so as to impart antimicrobial properties to said wound covering article.

Applicants respectfully traverse this rejection. Specifically, the paragraph bridging columns 1 and 2 of GANSTER states:

> An object of the invention was accordingly to provide aging-resistant polyurethane gels on the basis of aliphatic isocyanates while avoiding amine catalysts, which gels, despite the low reactivity of the aliphatic NCO groups, react as least as fast as conventional products produced with aromatic isocyanates and furthermore to provide polyurethane foam gels and γ-sterilisable polyurethane gels and polyurethane foam gels.

According to GANSTER, the above object is achieved by producing the polyurethanes from a combination of certain polyether polyols and hexamethylene diisocyanate in the presence of antioxidants and certain bismuth(III) carboxylates as catalysts.

Further, col. 3, lines 44-67 of GANSTER states (emphases added):

> According to the invention, <u>additives conventional for polyurethanes</u>, such as fillers, dyes, thickeners, extenders, resins etc., may be added to the hydrophilic gel compositions, preferably <u>in an amount of up to 100 wt. %, relative to the polyols a). The fillers used are the additives known per se from polyurethane chemistry, such as for example inorganically or organically based short fibres.</u> Inorganic fillers which may in particular be mentioned are powders prepared from zinc oxide and titanium oxide, together with glass fibres, such as glass fibres of 0.1-1 mm in length. Organic fillers which may in particular be listed are swellable powders and fibres having a fibre length of >0.01 mm, for example fibres based on polyacrylic acids and the salts thereof or others, as are for example stated in Absorbent Polymer Technology (Brannon-Peppas, Harland, Elsevier, Amsterdam-Oxford-New York-Tokyo, 1990, pp. 9-22), and materials used as textile fibres, such as for example polyester or

> polyamide fibres. Dyes or colouring pigments should in particular be taken to be those as may be used in foodstuffs, packaging or cosmetics. Liquid extenders or resins are in particular polymeric vinyl compounds, polyacrylates and other copolymers conventional in adhesives technology, which may have an influence upon adhesion properties.

According to Table 1 in col. 7/8 of GANSTER, several of the working examples thereof employ a filler in an amount which invariably is about 40 % by weight of the polyurethane. However, GANSTER does not appear to disclose the identity of the filler, and neither do the Examples of GANSTER point out and/or illustrate any particular advantage which might be attributed to the presence of the filler.

GILCHRIST, on the other hand, discloses a specific water-soluble glass which contains silver or a silver compound and may be "in the form of a powder, granules, woven into a dressing form, a sinter shaped in a particular way or used as filler in polymers for surface release." See abstract of GILCHRIST. In col. 3, lines 18-50, GILCHRIST states (emphases added):

> According to one aspect of the present invention, there is provided a medicinal substance for topical application which comprises a water-soluble glass containing silver orthophosphate, and means to maintain the substance in contact with a surface of a body.
>
> According to a second aspect of the invention there is provided a method of retarding bacterial growth at the surface of a body, comprising applying to the surface water-soluble glass silver orthophosphate, and maintaining the glass in contact with the surface.
>
> The invention can be employed, for example, in treating wounds, catheter and tubing entry points, stoma sites and body passage entrances where bacterial growth and migration are rife.
>
> Preferably, said glass is adapted by the use of glass modifiers to give a sustained release of silver over a set period. The means to maintain the substance in contact with the surface may be a carrier combined with the glass or could be separate from the glass. If used alone, the glass may be in the form of a powder, as granules, as fibres that can be woven into a dressing form, as a sinter which may be shaped in a particular way, or cast into the required shape eg a collar to surround the area of

penetration of a catheter into the body.

When combined with a carrier the glass may be used as a filler in polymers for surface release eg in silicones, natural and synthetic rubbers and medical plastics and polymers.

Alternatively, the glass may be incorporated in the adhesive of adhesive film dressings, in lint, wool, tow and gauze dressings and as part of wound management products such as foam, hydrogels and hydrocolloids, films, gels and creams.

Combinations of these examples can also be used.

Col. 6, lines 39-44 of GILCHRIST reports that silicone rubber sheets impregnated with the glass composition disclosed therein were cut into small discs and put onto agar which was then inoculated with various organisms, resulting in significant zones of inhibition.

Further, according to col. 7, lines 6 - 9 of GILCHRIST, sheets of silicone rubber containing 10 % of silver containing water-soluble glass were cut into discs and the latter were implanted in mice.

In col. 7, lines 18 – 46, GILCHRIST states (emphases added):

The ability of these SRP's [silver containing water-soluble glass compositions], when incorporated in a dressing or dispersed in a carrier, to sustain the release of active levels of silver over a period of days or even weeks, if required, offers a simple and adaptable form of treatment which may be `tailor-made` to requirements. Thus burn sepsis, surgical and traumatic wounds and ulcers and pressure sores may be effectively treated.

Examples of the use of such SRP's are given below:

a) If the SRP powder is mixed with a filler it may be pressed into the desired shape and then heated to fuse as a sinter in its final form.

b) Sheet material may be formed by mixing a polysaccharide such as alginate with SRP granules and subjecting the mix to a paper-making process so producing a board. Paper can be incorporated to give mechanical strength. In this way a dressing or a collar can be produced.

c) The SRP may be incorporated into silicon rubber and the rubber then applied to the treatment area, for example as a pad or collar. Catheter bodies, surface linings of cannulae, drainage tubes and the like, or superficial silicon coating of various instruments and appliances may be protected by rubber containing SRP.

> In such uses, the SRP-impregnated rubber may form the entire wall thickness of the catheter or other tubing, or may be used in the form of a sleeve or coating on the outer face of a conventional catheter or tube whose wall is made of PVC or other material.

Accordingly, what GILCHRIST teaches is that the silver containing glass disclosed therein can be used in a wide variety of forms and in a host of combinations with other materials. Regarding one of the many disclosed potential applications of the silver containing water-soluble glass, i.e., the use thereof as a "filler" for a polymer, the only polymer repeatedly mentioned by GILCHRIST is a silicone rubber. Although the glass filled silicone rubber of GILCHRIST has many potential uses it is not clear that the use thereof as a wound covering article is even contemplated by GILCHRIST.

GANSTER, on the other hand, mentions fillers and in particular, glass (fiber) fillers, only in passing and among many other (and very different) suitable fillers. While some of the working examples of GANSTER do employ a filler, GANSTER does not even disclose what substance(s) constitute the filler.

At any rate, the fillers of GANSTER belong to the "additives known per se from polyurethane chemistry" and can be employed in considerable amounts, i.e., in amounts of up to 100 wt. %, relative to the polyols employed for the production of the polyurethane. The glass "filler" of GILCHRIST, on the other hand, clearly does not belong to the "additives known per se from polyurethane chemistry". For example, a water-soluble material (glass) is usually not suitable for use as a filler. Further, in general a filler is an inexpensive material, i.e., is used to extend a material that is (much) more expensive than the filler. In contrast, the silver containing glass of GILCHRIST apparently is relatively

expensive and in any event probably more expensive, on a weight basis, than the polyurethane materials of GANSTER. In this regard, it is noted that the amounts of filler used in (some of) the working examples of GANSTER, i.e., about 40 % by weight of the polyurethane, are considerably higher than the amount of silver containing glass in the silicone rubber of GILCHRIST, i.e., 10 % by weight.

For at least all of the foregoing reasons, one of ordinary skill in the art would not be motivated to combine the teachings of GANSTER and GILCHRIST and use the silver-containing glass of the latter as filler in the polyurethane article of the former. In this regard, it must not be forgotten that the emphasis of the teaching of GANSTER is not on substances or materials which can be added to the ready-for-use polyurethanes described therein (in fact, about 50 % of the working examples thereof do not employ any additives) but on the use of certain compounds which are to be used in the preparation of the polyurethanes, in particular, antioxidants and certain condensation catalysts. Accordingly, only with hindsight is it possible to arrive at the conclusion that one of ordinary skill in the art would have been motivated to use the silver containing glass of GILCHRIST to fill the polyurethane resins of GANSTER.

In view of the foregoing it is submitted that the rejection of claims 1-8, 10, 19, 25-39, 41, 48, 49, 50, 54, 56-62, 64-66, 101 and 102 under 35 U.S.C. § 103(a) over GANSTER in view of GILCHRIST is unwarranted and should be withdrawn, which action is respectfully requested.

Response to Remaining Rejections under 35 U.S.C. § 103(a)

All of the remaining rejections under 35 U.S.C. § 103(a) set forth in the present Office Action relate exclusively to dependent claims. As set forth above, the claim from which all of these claims depend either directly or indirectly, i.e., claim 1, is not rendered obvious by GANSTER in view of GILCHRIST. For this reason alone, none of the dependent claims is rendered obvious, either. In view thereof, there appears to be no need to comment in detail on each and every rejection of the dependent claims set forth in the present Office Action and each and every document cited in connection therewith. It is emphasized, however, that Applicants' silence in this regard is by no means to be construed as Applicants' admission that any of these rejections is meritorious.

Only a few selected rejections of the dependent claims will be addressed in the following.

1. The rejection of claims 23 and 24 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of PARK concedes that neither GANSTER nor GILCHRIST explicitly teach the elements recited in claims 23 and 24 but alleges that PARK "teaches an antimicrobial wound covering article comprising: a synthetic polymer, such as a polyurethane polyethylene copolymer; and an additive present in an amount from about 0.5 wt. % to about 15 wt. %, wherein said additive includes humectants (i.e., superabsorbers) selected from karaya gum, sodium carboxymethylcellulose (NACMC), and mixtures thereof". The rejection further alleges that it would have been *prima facie* obvious to one of ordinary skill in the art to modify the antimicrobial wound covering article allegedly resulting from the combined teachings of

GANSTER and GILCHRIST to include a "humectant (i.e., superabsorber)" therein, so as to provide the article with the ability to readily absorb wound exudates.

Applicants respectfully submit that this rejection clearly is without merit. For example, the mere fact that PARK happens to mention some substances for use as humectants which according to the present invention can be used as superabsorbers apparently does not mean that each and every humectant is a superabsorber and each and every superabsorber is a humectant.

Already the term "superabsorber" indicates that a corresponding material is capable of absorbing large quantities of (aqueous) liquids. The term "humectant" on the other hand indicates the ability to keep something humid or moist, i.e., an ability which is not only unrelated to, but even in conflict with the ability to absorb large quantities of liquids. Specifically, a substance that is capable of absorbing large quantities of liquids would not appear to be a good candidate for use as a humectant. For example, superabsorbers find use in articles such as diapers for keeping a baby dry and to prevent a humid environment inside the diaper from occurring (i.e., are clearly not intended to act as humectants).

Further, paragraph [0037] of PARK recites several substances which can serve as "humectant and wound healing promoter". Already at the first glance, most of these substances would not be useful as absorbents, let alone as superabsorbers, for example, hyaluronic acid, heparin, dermatan sulfate, chondroitin sulfate, to name just a few.

Moreover, in the case of a substance such as, e.g., carboxymethylcellulose, the ability to absorb large quantities of liquids is related to the number of (salified) carboxy groups which are present per molecule. In other words, a particular carboxymethylcellulose

may be suitable for use as a humectant but may not comprise enough (salified) carboxy groups to be able to absorb large quantities of liquids and thereby act as a superabsorber. In this regard, it is emphasized that PARK neither teaches nor suggests that the "humectant and wound healing promoter" mentioned therein should be able to absorb large quantities of liquids.

Applicants respectfully submit that at least for all of the foregoing reasons PARK does not render it obvious to incorporate a superabsorber in the polyurethane resin described therein, let alone in the polyurethane resin of GANSTER.

Applicants further note that new claims 104, 105 and 131 submitted herewith recite materials for use as superabsorbers which are not even mentioned in PARK. This is a further reason why the subject matter of these claims is not rendered obvious by the combined disclosures of GANSTER, GILCHRIST and PARK.

2. The rejection of claims 98-100 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combined teachings of GANSTER and GILCHRIST in view of NOMURA concedes that neither GANSTER nor GILCHRIST explicitly teach that the wound covering article allegedly resulting from the combined teachings of GANSTER and GILCHRIST possesses discoloration resistance, as claimed in the rejected claims. However, the rejection essentially alleges that from NOMURA it can be taken that the silver containing glass disclosed therein possesses discoloration resistance, thereby allegedly rendering obvious the subject matter of claims 98-100.

Applicants respectfully disagree with the Examiner also in this regard. Applicants acknowledge that NOMURA discloses a glass composition which is reported to have

discoloration resistance. However, a closer look at the Examples of NOMURA reveals that the discoloration resistance referred to therein is measured according to a particular method, i.e., the method described in paragraph [0072] of NOMURA. Specifically, the discoloration resistance of NOMURA is determined by irradiating woven fabrics with a xenon lamp at 450 W/m^2 for 200 hours and measuring the color difference ΔE, with a value of ΔE of less than 1 being considered to indicate discoloration resistance. In comparison, present claims 98-100 recite that the article does not show a noticeable discoloration after having been kept at 50 °C for 6 months or after having been sterilized with 26 kGy of γ-rays, respectively.

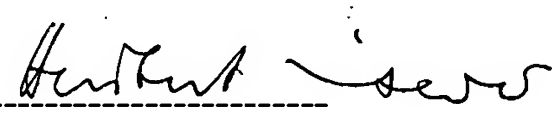
Applicants fail to see why the disclosure of a silver glass containing composition which shows a color difference ΔE of less than 1 after irradiation with a xenon lamp at 450 W/m^2 for 200 hours (i.e., about 8 days) renders it obvious to employ a silver containing glass which does not show a noticeable discoloration after having been kept at 50 °C for 6 months (i.e., about 180 days) or after having been sterilized with 26 kGy of γ-rays, respectively. The present Office Action does not appear to contain any explanation in this regard, let alone to cite any documentary evidence which makes it reasonable to assume that the method of NOMURA and the methods recited in the rejected claims afford the same or at least comparable results.

For at least the foregoing reasons, the rejection of claims 98-100 under 35 U.S.C. § 103(a) over the combined teachings of GANSTER and GILCHRIST in view of NOMURA is unfounded and should be withdrawn.

CONCLUSION

In view of the foregoing, it is believed that all of the claims in this application are in condition for allowance, which action is respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

Respectfully submitted,
Wolfgang MEYER-INGOLD et al.



Neil F. Greenblum
Reg. No. 28,394

September 13, 2006
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191

Heribert F. Muensterer
Reg. No. 50,417

Reference: Glossary

EMF SHIELDING A conductive coating that is applied to intercept and dissipate electromagnetic fields, often used on sensitive electronic devices.

END GROUPS Structural units that terminate polymer chains.

ENGINEERING PLASTIC A polymer with an appropriate combination of stiffness, toughness, and dimensional stability that is formed into parts such as gears, bearings, and casings.

ESTER VALUE The saponification number less the acid number.

EPOXIDE EQUIVALENT WEIGHT (EPOXIDE EW) The weight in grams of material containing one epoxide group. The epoxide EW for a diepoxide is one-half the molecular weight.

FORD CUP A viscosity measurement using a small cup to determine the time for a given amount of liquid to flow through an orifice in the bottom of the cup. Six different orifice sizes are typically used.

FOX EQUATION An equation that predicts the glass transition temperatures, based on the homopolymer glass transition temperature: (T_{g_n}) in degrees Kelvin and the monomer weight fractions (W_n) (for random co-polymers).

$$\frac{1}{T_g} = \frac{W_1}{T_{g1}} + \frac{W_2}{T_{g2}} + \text{etc.}$$

GARDNER COLOR A system of color standards based upon stable solutions of ferric chloride. (See ASTM D 523).

GARDNER GLOSS A value that quantifies the degree of reflection of light from a surface. It is determined by comparing the strength of reflected light from a test surface area to that from a standard surface.

GARDNER-HOLDT VISCOSITY A viscosity measurement based on a bubble viscometer. Viscosity is given in stoke units or as an alphabetical letter. *Also see Viscosity Comparison chart for Newtonian Liquids.*

GEL PERMEATION CHROMATOGRAPHY, (GPC) Also called Size Exclusion Chromatography (SEC). A column chromatograhpic method of determining the molecular weight distribution of a polymer, based on its hydrodynamic volume. Values are often given relative to a standard, usually polystyrene.

GLASS TRANSITION TEMPERATURE, (T_g) The temperature at which the amorphous regions of a polymer soften from a rigid, glassy solid to a flexible, viscous liquid. The value is dependent on molecular weight, impurities, "aging" factors, and testing procedure.

HYDROPHILE-LIPOPHILE BALANCE, (HLB) An arbitrary value between 0 and 60 defining the affinity of a surfactant for water (>10) or oil (<10). The values are used to select a surfactant for an O/W or W/O emulsion. Ionic surfactants have recently been assigned HLB values.

HYDROXYL NUMBER A measure of the number of hydroxyl groups present in a polymer. The weight in milligrams of KOH required to neutralize the hydroxyl groups in one gram of polymer. Determined by acetylation using acetic anhydride and titration of the acetic acid and excess anhydride with potassium hydroxide.

IODINE VALUE The grams of iodine that react with 100 grams of sample. A measure of unsaturation.

IONOMER A polymer with repeating ionic groups, which tend to aggregate to form ionic domains that act as physical cross-links. The domains dissociate on heating allowing the material to be processed as a thermoplastic.

ISOTACTIC *see TACTICITY*

IZOD IMPACT The impact strength measured when a falling weighted pendulum strikes a rectangular specimen. The specimen may be notched or unnotched. (See ASTM D 256).

K-VALUE, FIKENTSCHER An empirical molecular weight value, K, based on dilute solution, viscosity, η_{rel}, and concentration, c.

$$(1/c) \cdot \log(\eta_{rel}) = \frac{(K_0 + 75K_0^2)}{(1 + 1.5K_0 c)}$$

$$K = K_0 \times 10^3$$

LIGHT SCATTERING A technique used to determine the absolute weight average molecular weight, M_w using a dilute solution of the polymer.

MACROMONOMERS High molecular weight (a somewhat arbitrary value) functional monomers. Also called macromers.

MARK-HOUWINK-SAKURADA CONSTANTS K and a values in the viscosity equation $[\eta]=KM^a$ where $[\eta]$ is the intrinsic viscosity and M is the molecular weight polymer.

MELT FLOW RATE *see MELT INDEX*

MELT INDEX (MI) The weight of polymer extruded through a cylindrical channel under the pressure of a piston. The amount of polymer extruded is a measure of the melt viscosity and inversely proportional to the molecular weight. Tests are run at specified temperatures and piston weights/pressures. Also called melt flow index. (See ASTM D 1238 and D 3159).

MELTING TEMPERATURE, (T_m) The temperature at which the crystalline regions of a polymer transform from an ordered, rigid structure into an amorphous, viscous liquid. *also see GLASS TRANSITION TEMPERATURE*

MODULUS A ratio of the tension (stress) to the elongation (strain) of a test specimen.

MOLAR SUBSTITUTION A term used in polysaccharide chemistry to define the number of molecules of a reagent that are attached to a monosaccharide unit. Since the reagent may react with the monosaccharide unit singularly or to form a pendant polymer chain, the value can range from zero (no attachment) to a very large number (polymeric attachment).